HANBELL

Hanbell Airend

Product & Application Overview

2024

www.hanbell.com.cn

Hanbell Group Overview

- Hanbell was founded in 1994, with over **30 years of history**
- Sino-foreign equity **joint venture**
- **Compressor** and **vacuum pump** technology research, development, production, sales, and service
- Approximately **2,300 employees globally**
- Shanghai HQ located at center of Yangtze River Delta with exceptional geographic advantage
- Standard ISO processes, BSC performance management system, **TQM**, TPS, QCC, MIS

Key Production Campuses



Shanghai Fengjing Plant (40,000m²)



Shanghai Xingta Plant (55,000m²)



Taiwan Guanyin Plant (10,000m²)



Taiwan Taichung Plant (11,000m²)



Hanson Zhejiang Foundry (52,750m²)



Hanyang Anhui Foundry (64,500m²)

Hanbell Group Overview

2023

> Assets

¥6.585B

> Revenue

¥ 3.852B

¥ 3.266B (2022Y)

> Net Profit

¥ 0.85B

¥ 0.644B (2022Y)

> Subsidiaries

14 Companies

Zhejiang Hanson	Shanghai Comer	Zhejiang Comer
Anhui Hanyang	Italy Comer	Korea Hanbell
Vietnam Hanbell	Taiwan Hanbell	Taiwan Vacuum
Chuxiong Hanbell	Hong Kong Hanbell	Qingdao TECO Century
USA Hanbell	Indonesia Hanbell	

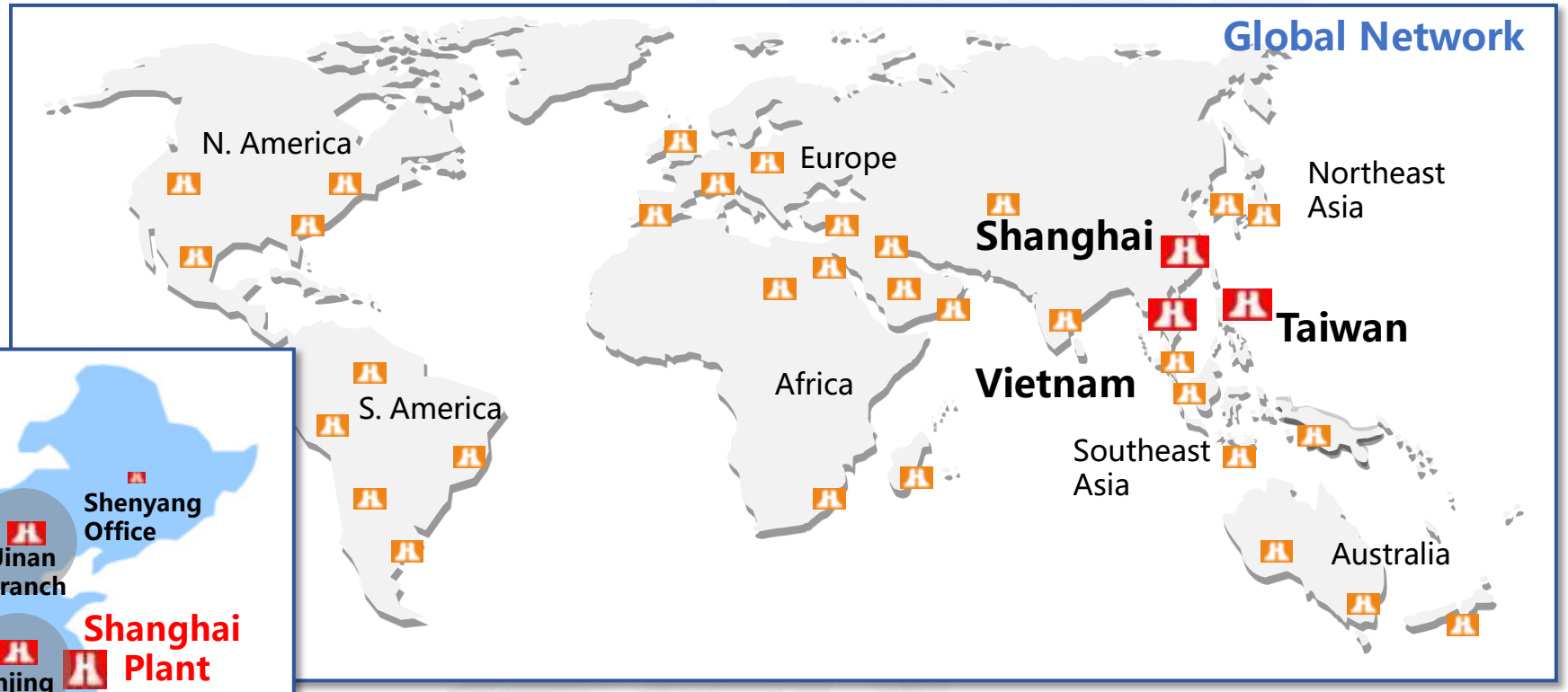
> Investment

8 Companies

Shanghai Denair	Shanghai Vacuum
Shanghai Jihan	Taiwan Hanpower
Hangzhou Hanchuang	Zhejiang Keente Motor
Hangzhou Changhe	Hunan Zhonglian

Global Sales & Service Network

Hanbell's products are sold in 50 countries across Asia, Europe, America, and Australia





Company History

1994 04 — Taiwan Hanbell Established

1996 09 — Shanghai Hanbell Established

2007 08 — SH Hanbell Listed On Shenzhen Stock Exchange

2008 07 — Guangzhou & Nanjing Branches Established

2009 07 — SH Comer Established (Fully-Owned Subsidiary)

2009 11 — Zhejiang Hanson Established (Fully-Owned Subsidiary)

2012 11 — Formed Hitachi HHM (Joint Venture)

2015 01 — Taiwan Hanpower Established (Joint Venture)

2016 04 — Acquired Qingdao Century Dongyuan

2016 12 — Invested In Denair (Shanghai)

2018 02 — Korea Hanbell Esablished

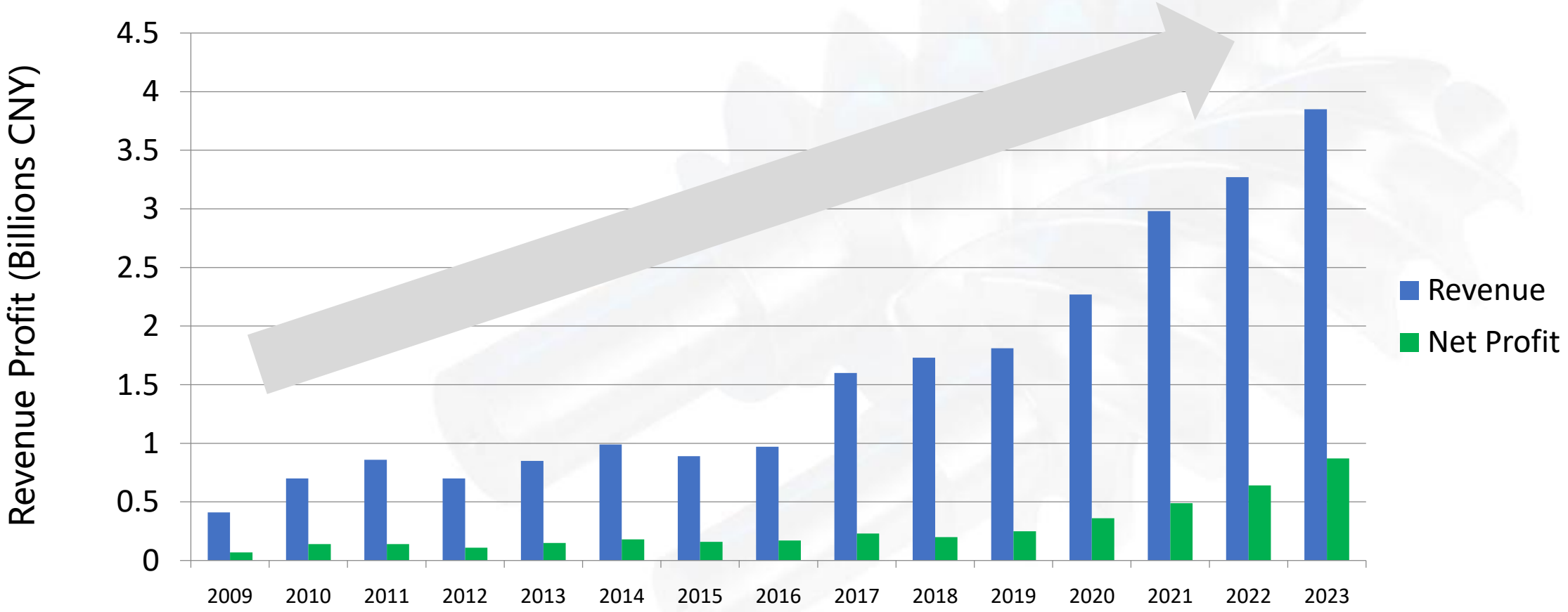
2019 05 — Invested In Indonesia Hanbell

2021 05 — Vietnam Hermes Established (Fully-Owned Subsidiary)

2023 07 — Invested In Zhejiang Knbmotor

Long-Term Growth

Consistent long-term revenue and profit growth



Note: Taiwan Hanbell financials included after 2017

Company Awards & Recognitions

2023
No. 66 Manufacturing Companies Top 100 In SH

2021
Top 500 Chinese Machinery Companies

2019
Top 100 Shanghai Machinery Industry

2018
Top 500 Valuable Manufacturing Listed Companies

2018
Top 100 Manufacturing Companies Shanghai

2017
Vice Chairman General Machinery Association Compressor

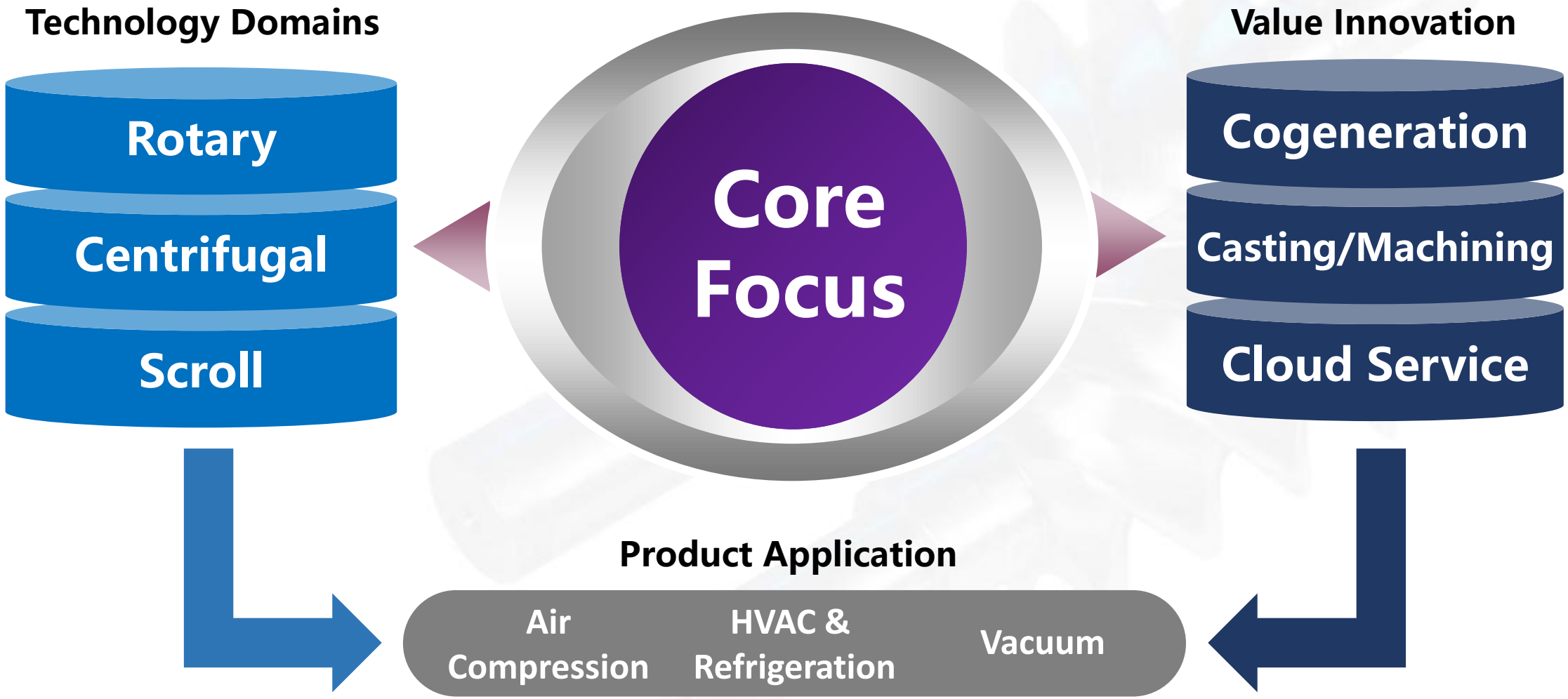
2016
Top 100 Manufacturing Industry Listed Companies

2015
Shanghai Quality Gold Award

2013
National Key New Product Enterprise

2010
Shanghai Famous Trademark

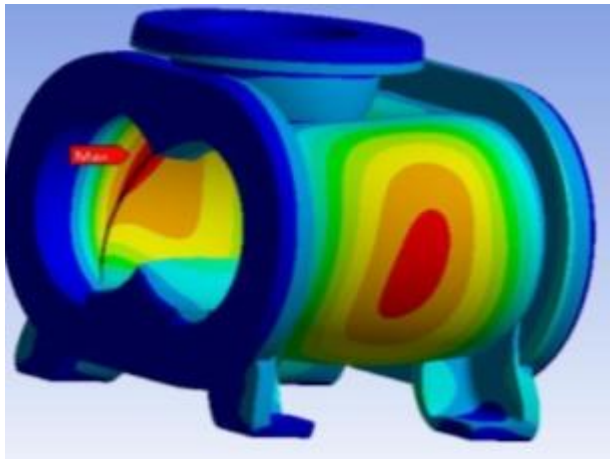
Core Focus

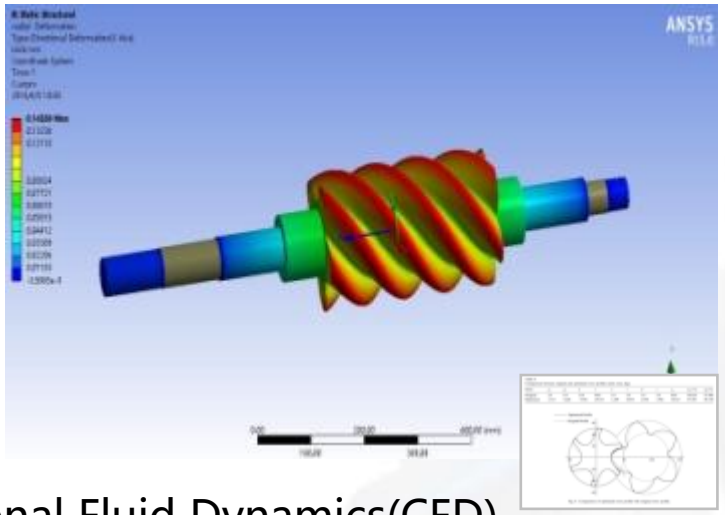

Technology Domains
Rotary
Centrifugal
Scroll
Core Focus
Value Innovation
Cogeneration
Casting/Machining
Cloud Service
Product Application
Air Compression
HVAC & Refrigeration
Vacuum

HANBELL

Hanbell Strengths

Strength: Research & Design





- FLUENT Computational Fluid Dynamics(CFD)





- 110+ Utility Model Patents

Rotary Design

- Advanced rotor profile design capability, supported by experienced Taiwan central R&D function
- 20+ invention patents, including new rotor profile invention patent

Simulation Analysis

- Employs advanced structural design and simulation capabilities, including Finite Element Analysis (FEA), to support mechanical design
- Utilizes advanced Computational Fluid Dynamics (CFD) simulations to optimize performance

Strength: Casting Foundry





- The Total Area Of Two Foundries: 120,000m²





- Germany Voxeljet 3D Printer

Casting Capabilities

- 2 wholly-owned casting plants, with combined annual production of 50,000 tons
- 2 resin sand lines, 1 iron mold/coated sand line, 3 ground mold lines
- Two 40 tons heat treatment furnaces; Eight 5~20T blasting machines

3D Printing & Scanning

- Casting plants possess 3D Printing capability that supports fast product development lifecycle
- 3D Printing machines are used to form complex shapes
- 3D engraving machines are coordinated to carve simpler shapes
- 3D scanning capability enhances quality control and reverse engineering

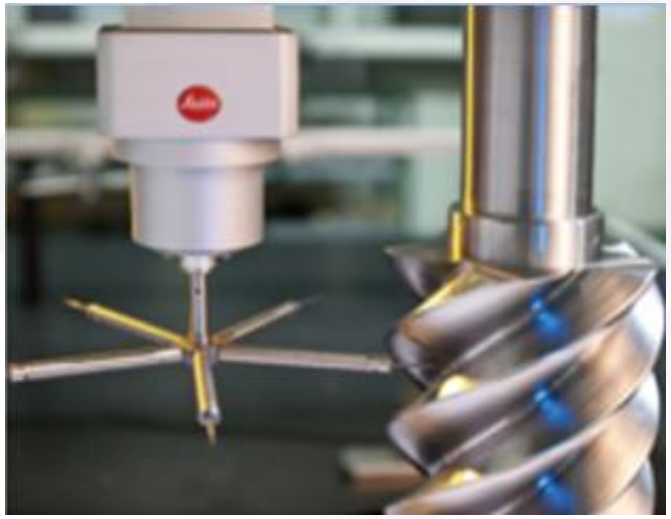
Strength: Precision Machining Capability





- Flexible Manufacturing System Automatic Guide Vehicle(AGV)





- Programmable Collaborative Robot

High-Precision Machining

- 15+ German KAPP rotor fine grinding machines
- 15+ Japanese Nigata rotor profile rough milling machines
- 40+ rough machining machines
- 40+ vertical and horizontal machining centers(fine machining)

Flexible Manufacturing System (FMS)

- High equipment efficiency, reduced personnel and management costs
- Advanced automation of machining, and on site management
- Guaranteed the stability of products quality

3D Inspection

- High-end, imported 3D inspection instruments ensure precision of manufactured parts

Hanbell Strengths: Assembly & Testing







- Testing System (Certified by Hefei General Institute)





- Semi-Automated Assembly Line

Testing Systems

- All products are 100% tested prior to shipment
- Testing include Functional tests and Noise and Vibration tests
- Testing system certified by Hefei General Institute (recognized by 3rd party)

Leakage Detection

- All compressors are 100% water-tested for leakage
- Helium mass spectrometer leak detector used for sampling test

Assembly

- Highly automated assembly lines ensure production quality and efficiency

HANBELL

Airend Product Overview

Airend: Single-Stage Rotary



AA
(Normal P.)

Power: 7.5~355 kW
Air Flow: 1~60 m³/min
Pressure: 6~16 bar.g



AB
(Normal P.)

Power: 7.5~315 kW
Air Flow: 1~50 m³/min
Pressure: 6~13 bar.g



AC
(Normal P.)

Power: 7.5~132 kW
Air Flow: 1~23 m³/min
Pressure: 6~10 bar.g



AH
(Laser Cutting)

Power: 7.5~37 kW
Air Flow: 0.5~4 m³/min
Pressure: 13~20 bar.g



AB-L
(Low P.)

Power: 15~250 kW
Air Flow: 1~50 m³/min
Pressure: 3~5 bar.g



AE-L
(Low P.)

Power: 90~315 kW
Air Flow: 30~83 m³/min
Pressure: 3~5 bar.g



AB Plus
(Normal P.)

Power: 7.5~37 kW
Air Flow: 1~7 m³/min
Pressure: 6~13 bar.g



AB/AC-PM
(Normal P.)

Power: 7.5~75 kW
Air Flow: 1~12 m³/min
Pressure: 6~10 bar.g



AD
(Compact, Normal P.)

Power: 7.5~22 kW
Air Flow: 1~4 m³/min
Pressure: 6~10 bar.g

Airend: Dual-Stage Rotary

Standard Airends

ABD-B (Normal P.)



Power: 30~450 kW
Air Flow: 6~91 m³/min
Pressure: 6~13 bar.g

AAD-B (High P.)



Power : 200~400 kW
Air Flow: 17~36 m³/min
Pressure: 17~35 bar.g

ABD-BL (Low P.)



Power: 22~400 kW
Air Flow: 6~92 m³/min
Pressure: 4~ 6 bar.g

Motor-Integrated Airends

ABD-D Dual PM (Normal P.)



Power: 55~185 kW
Air Flow: 12~33 m³/min
Pressure: 6~10 bar.g

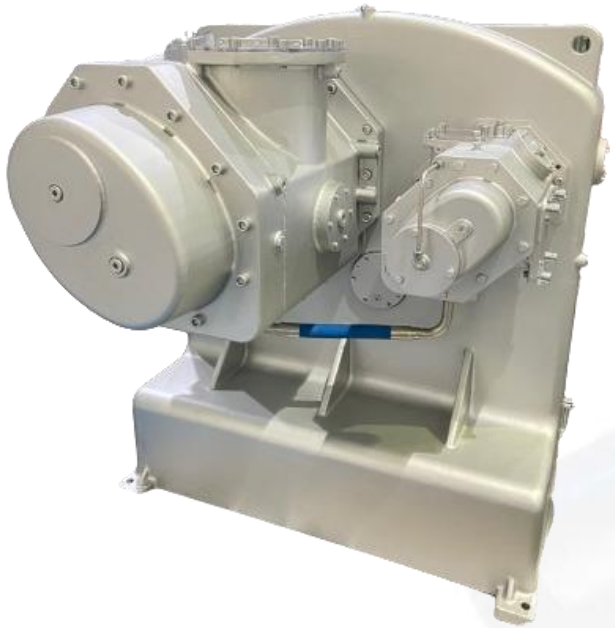
ABD-Y Single PM (Normal P.)



Power: 18.5~75 kW
Air Flow: 3.5~16 m³/min
Pressure: 6~10 bar.g

Oil-Free Rotary & Oil-Lub. Vacuum Pump

AXD
Two-Stage Oil-Free Rotary



Power: 55~425 kW
Air Flow: 5~63 m³/min
Pressure: 7~10.5 bar.g

AP
Oil-Lubricated Vacuum Pump



Power: 5.5~90 kW
Pump Speed: 410~5000 m³/hr
Ultimate Pressure: 0.5 Torr

Airend: Oil-Free Scroll

SAM
Oil-Free Scroll
(Belt)



Power：3.7～7.5kw
Air Flow： 0.4～0.85 m³/min
Pressure：4.0~10.5 bar.g

SAM-D
Oil-Free Scroll
(Direct)



Power：3.7～7.5kw
Air Flow： 0.35～0.85 m³/min
Pressure：4.0~10.5 bar.g

HANBELL

Address: No. 8289 TingFeng Rd., FengJing Area, JinShan District, Shanghai, China
Phone: +86 3110 6868 +86 5735 0280
Fax: +86 5735 2004
Email: sales@hanbell.xyz